Roland®

GENERAL MIDI GS

Digital Sequencer And Sound Module

MT 120s

OWNER'S MANUAL

The MT-120S comes with two manuals:
MT-120S Owner's Manual
MT-120 Owner's Manual

This manual explains the basic usage of the MT-120S with an acoustic piano.
Check out the MT-120 Owner's Manual for other aspects of the operation of the MT-120S.

We'd like to take a moment to thank you for purchasing the Roland MT-120S Digital Sequencer and Sound Module.

Features of the MT-120S

The MT-120 Along with an Amp and Speakers in a Single Unit
Now you can play your disks simply and easily, without the hassle of hooking up cables for speakers and amps.

Acoustic Piano Accompaniment
Using an acoustic instrument such as an acoustic piano, violin, and flute along with SMF Music Data or ism Music Data (available separately), you can practice (or perform 'Minus One' play) with an orchestral accompaniment.

A Sequencer with All the Functions of the MT-120
The MT-120S offers a Repeat function as well as Metronome and Count In functions that are handy when practicing. You can also use Track Mute for one-hand piano practice.

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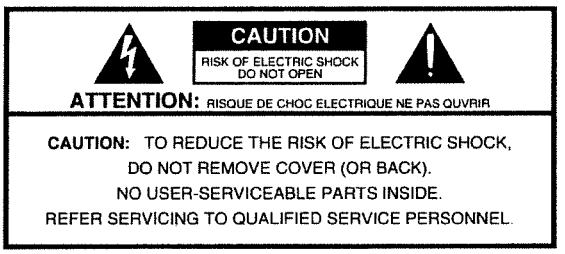

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
ATTENTION: RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

IMPORTANT SAFETY INSTRUCTIONS
SAVE THESE INSTRUCTIONS

WARNING - When using electric products, basic precautions should always be followed, including the following:

1. Read all the instructions before using the product.
2. Do not use this product near water — for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.
3. This product should be used only with a cart or stand that is recommended by the manufacturer.
4. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
5. The product should be located so that its location or position does not interfere with its proper ventilation.
6. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
7. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
8. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
9. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
10. The product should be serviced by qualified service personnel when:
    A. The power-supply cord or the plug has been damaged; or
    B. Objects have fallen, or liquid has been spilled onto the product; or
    C. The product has been exposed to rain; or
    D. The product does not appear to operate normally or exhibits a marked change in performance; or
    E. The product has been dropped, or the enclosure damaged.
11. Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

For the USA

This product may be equipped with a polarized line plug (one blade wider than the other) . This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.

For Canada

For Polarized Line Plug

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU' AU FOND.

For the U.K.

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE : NEUTRAL
BROWN : LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Basic Precautions / Using Disks

In addition to the items listed under Safety Precautions on the opposite page, please read and observe the following:

Power Supply

- Before connecting this unit to other devices, turn off the power to all units; this will help prevent damage or malfunction.
- Do not use this unit on the same power circuit with any device that will generate line noise; an electric motor or variable lighting system for example.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum.
- This unit may interfere with radio and television reception. Do not use this unit in the vicinity of such receivers.
- Observe the following when using the unit's disk drive. For further details, refer to "Before Using Disks".
  - Do not place the unit near devices that produce a strong magnetic field (eg., loudspeakers).
  - Install the unit on a solid, level surface.
  - Do not move the unit or subject it to vibration while the drive is operating.
- Do not expose the unit to temperature extremes or install it near devices that radiate heat. Direct sunlight in an enclosed vehicle can deform or discolor the unit.

Maintenance

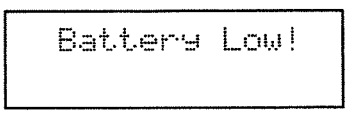
- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water.
- Never use benzene, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Additional Precautions

- Protect the unit from strong impact.
- Never strike or apply strong pressure to the display.
- A small amount of heat will radiate from the unit during normal operation.
- Before using the unit in a foreign country, consult with qualified service personnel.

Memory Backup

- This unit contains a battery which powers the unit's memory circuits while the main (AC) power is off. The expected life of this battery is 5 years or more.
  However, to avoid the untimely loss of memory data, it is strongly recommended that you change the battery every 5 years.
  Please be aware that the actual life of the battery will depend upon the physical environment — especially the temperature — in which the unit is used. When it is time to change the battery, consult with qualified service personnel.
- When the battery becomes weak the following message will appear in the display: "Battery Low!". Please change the battery as soon as possible to avoid the loss of memory data.



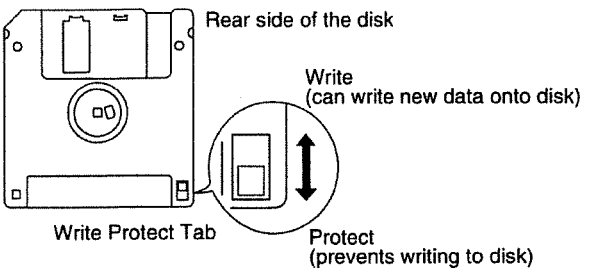
Before Using Disks

Handling the drive

- Install the unit on a solid, level surface in an area free from vibration. If the unit must be installed at an angle, be sure the installation falls within the specified range: upward; 15°, downward; 5°.
- Avoid using the unit in areas of high humidity (eg., condensation). High levels of humidity can adversely affect the operation of the drive and/or damage floppy disks.
  When the unit has been transported, allow it to warm to room temperature before operating.
- To insert a disk, push it gently but firmly into the drive — it will click into place. To remove a disk, press the EJECT button firmly. Do not use excessive force to remove a disk which is lodged in the drive.
- Never attempt to remove a floppy disk from the drive while the drive is operating (the indicator is brightly lit); damage could result to both the disk and the drive.
- Remove any disk from the drive before powering up or down.

Handling Floppy Disks

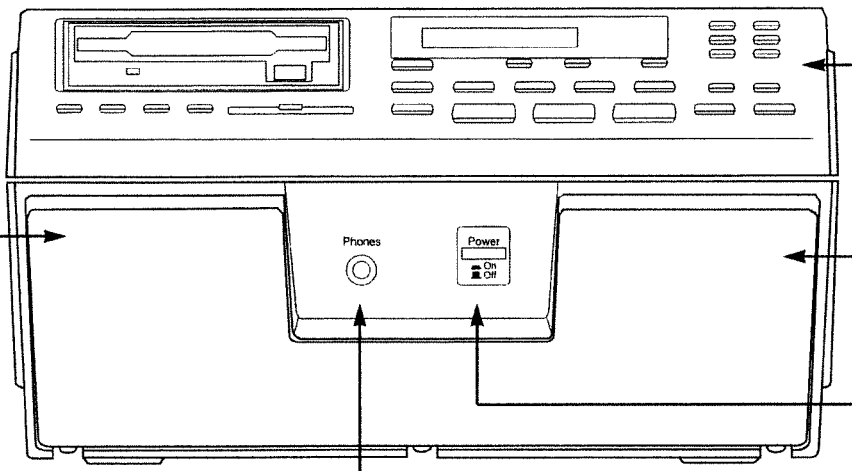
- Floppy disks contain a magnetic storage medium (much like magnetic recording tape). Please observe the following when handling floppy disks:
  - Never touch the magnetic medium inside the disk.
  - Do not subject floppy disks to temperature extremes (eg., direct sunlight in an enclosed vehicle). Recommended temperature range: 10 to 50°C.
  - Do not expose floppy disks to strong magnetic fields, such as those generated by loudspeakers.
- Floppy disks contain a 'write protect' tab which can protect the disk from accidental erasure. It is recommended that the tab be kept in the 'PROTECT' position and moved to the 'WRITE' position only when you wish to write new data onto the disk.



- All important data should be copied onto backup disk(s). This provides a complete duplicate of the data should the original disk(s) be lost or damaged.
- The identification label should be firmly fixed to the disk. Should the label come loose while the disk is in the drive, it may be difficult to remove the disk.
- Put the disk back into its case for storage.

Part Names

Front Panel



See page 5 of the MT-120 Owner's Manual for these descriptions.

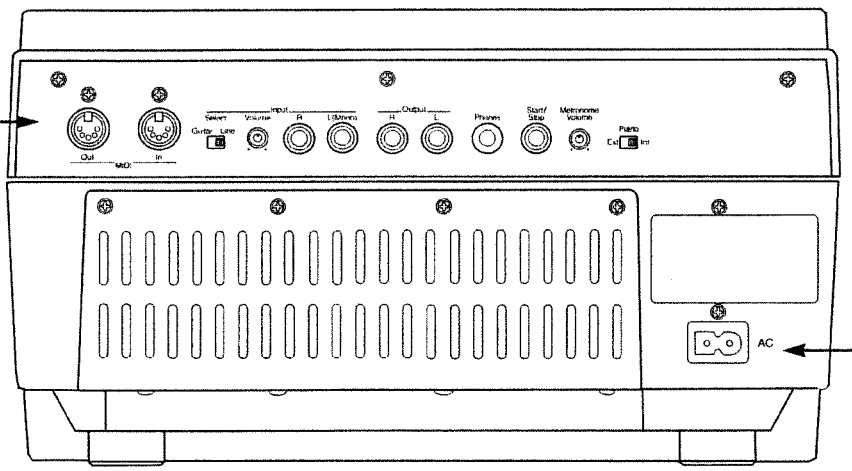
Left Speaker
Reproduces the left channel sounds.

Right Speaker
Reproduces the right channel sounds.

Headphone Jack
This is the jack to use for plugging in headphones.
The speakers are cut off when headphones are plugged in, making it great for playing at night or when other people are around.

Power Switch
This turns the power to the MT-120S on and off.

Rear Panel



See page 4 of the MT-120 Owner's Manual for these descriptions.

* The Output L jack on the MT-120S cannnot be used for Mono output.

* Make sure that the Piano switch on the back of the MT-120S is set to "Int."

AC Inlet
Plug in the power cord that comes with the MT-120S, then plug the other end of the cord into a wall socket.

Turning On the Power

(1) Connect the AC cord that came with the unit into the MT-120S, then plug the other end into an AC socket.
(2) Turn down the volume to its lowest level (all the way to the left).
(3) Turn on the power switch.

* This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

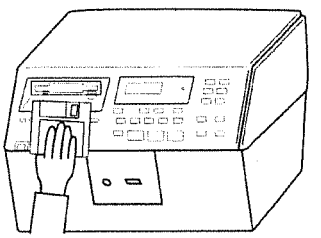
Listen to a Song on Disk

It's easy to listen to a song recorded on a disk: just insert the disk into the drive, select the Song you want to hear by pressing the Value buttons, and then press the Play button.

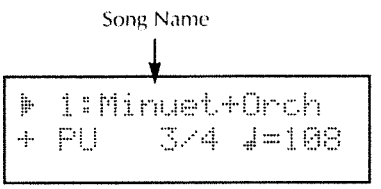
Inserting the Disk

(1) Insert the disk into the disk drive.

This time around, we'll listen to one of the songs on the Demo Song Disk that came with your MT-120S.



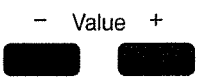
The title of the first song on the disk will appear in the display.

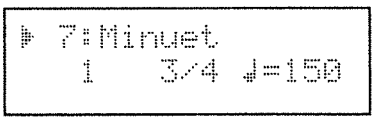


Selecting a Song

(2) By pressing the [Value -] and [Value +] buttons, the display will change to show the name of the next song on the disk.

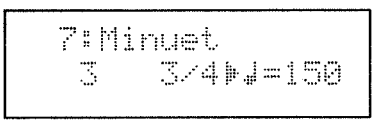
In this example, we'll select the piano piece called "Minuet."



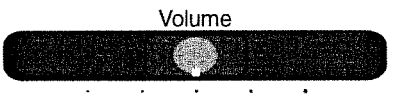


Starting Play

(3) Press the [Play] button to start playback of the song. The [Play] button will light.



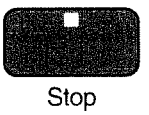
Adjust the volume using the MT-120S's volume slider.

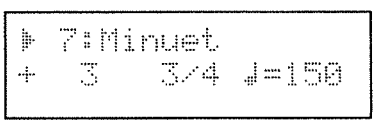


As you listen, you can read along with the music score at the end of the MT-120 Owner's Manual.

Stopping Playback

(4) Press the [Stop] button to stop playback of the song. The [Play] button will go out.

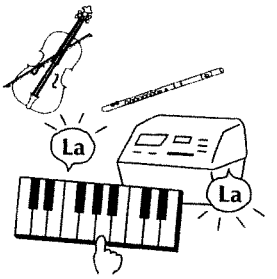




* A "+" sign (just before the measure number in the display) indicates that play was stopped in the middle of that measure.

Tuning

When you play the MT-120S (GS Sound Source) together with an acoustic instrument, make sure that the two are in tune with each other.



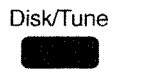
MT-120S Tuning

You can change the tuning using the Master Tune feature on the MT-120S as follows.

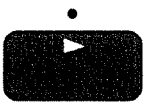
* The factory default value for the Master Tune setting is 440.0Hz.

(1) Press the [Disk/Tune] button two times.

The display will show the frequency of the tuning note "A4".

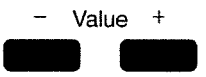


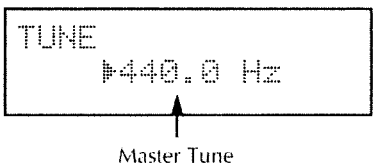
(2) Pressing [Play] causes an A4 (la) pitch to sound.



(3) While playing the middle A (la) on the piano (or the note of corresponding pitch on another instrument), use the [Value -] and [Value +] buttons to adjust the pitch (up or down). The sound stops when you press [Stop].

* This setting remains in memory even after the power is switched off.

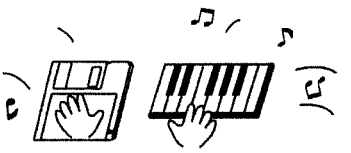




(4) Press [Enter] when everything is tuned to your satisfaction. The Play screen display will return.

Playing Along with a Song on the Disk

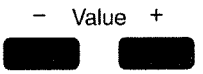
Using the Mute feature, you can turn off one part of a piano piece recorded on a disk and play that part yourself!

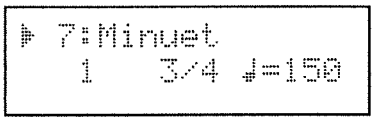


Selecting a Song

Try playing through a little of the "Minuet" (the printed music is included at the back of the MT-120's manual).

(1) Insert the Demo disk into the disk drive, and by pressing the [Value -] and [Value +] buttons, select "Minuet."

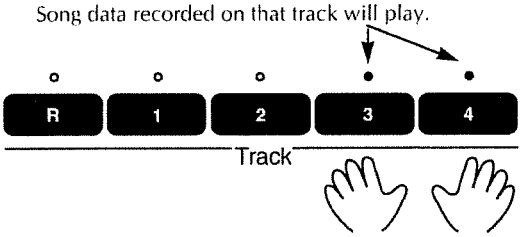




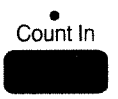
One Hand Practice

This song has the left hand piano part recorded on Track 3, and the right hand part on Track 4.
So, here's the plan: turn off Track 4 (the right hand part) and play it yourself on the piano!

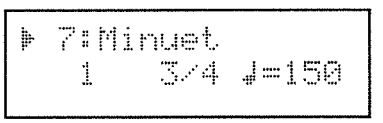
When the green light above a track button is lit, the Song data recorded on that track will play.



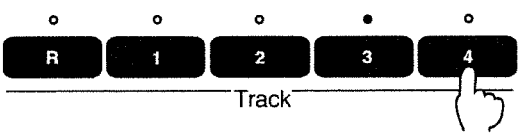
(2) Press the [Count In] button, and the button's indicator will light.
This lets you hear an audible two-measure count before the song starts playing.



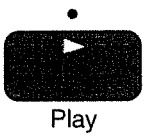
(3) Press the [Reset] button to reset the song to the beginning.



(4) Press the Track 4 button so that the green light is turned off (mute). The right hand part will not be heard now.



(5) Press the [Play] button, and the song "Minuet" will start to play; left hand part only, of course. Try playing the right hand part yourself along with the music.



(6) When you wish to stop playback, just press the [Stop] button.

(7) Press the Track 4 button again, and the green light will be turned on again. Track 4 will now be heard.
When you practice the left hand part, turn off Track 3.

* In addition to the Track muting just described, on the MT-120S you can mute out a specific part for Minus One play. Check out page 67 of the MT-120 Owner's Manual for details.

Specifications

<Sequencer Section>

Song Data:

Internal Memory	1Song, Approx. 42,000 notes
Disk (2HD/1.44MB)	99Songs, Approx. 240,000 notes

Maximum Song Length:
999 measures

Tracks:
5 (4+Rhythm)

Resolution:
120 ticks per quarter note

Tempo:
Quarter note = 20 to 250 beats per minute

Maximum simultaneous input notes (when recording):
32

Maximum simultaneous output notes (during playback):
60

Sync:
MIDI

<Sound Source>

(General MIDI System / GS Format Sound Source)

Maximum Polyphony:
28 voices

Number of Parts:
16

Number of Tones:
226

Number of Drum Sets:
9 (8+SFX Set)

<Hardware>

Disk Drive:
3.5 inch micro floppy disk drive
(2DD/720KB 2HD/1.44MB)

Display:
16 characters; 2 lines

Connectors:
Two MIDI Connectors (IN/OUT)
Two Output Jacks (L/R)
Two Input Jacks (L/R) with Guitar/Line select switch
Two Phones Jack (Stereo; Front/Rear)
Start/Stop Control Jack
AC Inlet

Speakers:
Full Range, magnetically sheilded; 8cm x 2

Rated Power Output:
7W x 2

Power Supply:
AC117V, AC 230V or 240V

Power Consumption:
33W

Dimensions:
305 (W) x 243 (D) x 168 (H) mm
12-1/16 (W) x 9-5/8 (D) x 6-5/8 (H) inches

Weight:
5.5kg
12lbs 3oz

<Accessories>

MT-120S Owner's Manual
MT-120 Owner's Manual
Demo Song Disk
Power Cord

* The MT-120S does not come with the supplement, an AC adapter, MIDI cable, audio cable, or DC/DC cable.

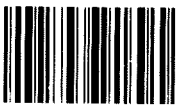
* In the interest of product development, the specifications and/or appearance of this unit are subject to change without prior notice.

00348912 '94-2-B3-11S

Roland®

70341890

UPC 70341890



Roland